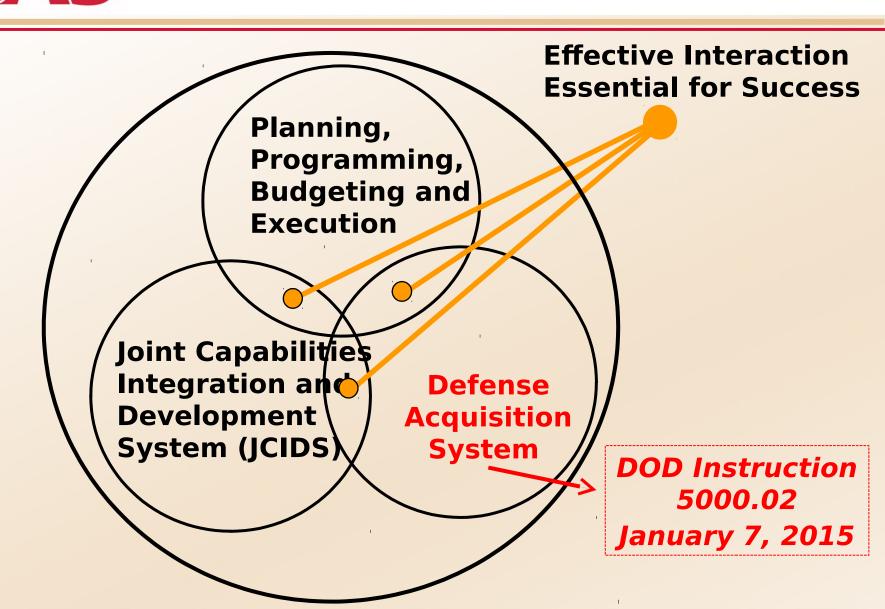


### Re-Issuance of DoDI 5000.02

January 7, 2015 (Key Changes to the Final DoDI 5000.02)

Briefer: Lt Col Joe Gueck

## **DoD Decision Support Systems**





### **Overarching Objectives**

- Decrease emphasis on "rules" and increase emphasis on process intent and thoughtful program planning & management
- Provide program structures and procedures tailored to the dominant characteristics of the product being acquired and to unique program circumstances, e.g., risk and urgency
- Enhance the discussion of program management responsibility and key supporting disciplines



### **Coordination Overview**

- Interim dated 25 November 2013 used for SD-106 Coordination
  - SD-106 issued 6 December 2013
  - Comments received through April 2014
- Nearly 400 comments. "Accept" and "Partial Accept" rates as follows:
  - -- Admin Comments 70%
  - -- Substantive Comments 57%
  - -- Critical Comments 85%
  - All Comments reviewed by one or more SMEs and by document lead
  - Adjudication reviewed by Staff Principal
  - Critical (and many substantive) comments reviewed by ASD(A)
  - Select comments (and entire document) reviewed by USD(AT&L), DOT&E, and DoD CIO



### DoDI 5000.02 Reissued on January 7, 2015

- Cancels Interim DoDI 5000.02
- USD(AT&L) Transmittal Letter sent to All Acquisition Workforce Members
  - Thoughtful program planning
  - Maximum latitude to tailor
  - Models are a Start Point
  - Continuous Process Improvement
- Document posted on DAU and DTIC websites



#### THE UNDER SECRETARY OF DEFENSE 3010 DEFENSE PENTAGON ASHINGTON, DC 20301-3010

JAN 0 7 2015

MEMORANDUM FOR THE ACQUISITION WORKFORCE

SUBJECT: Department of Defense Instruction 5000.02

This memorandum issues the new Department of Defense Instruction (DoDI) 5000.02 and cancels the interim version that was implemented on November 25, 2013. This version and cancers the internal version that was implemented on ivovenior 25, 2015. This version implements many of the policies and practices included in the sequence of three sets of Better Buying Power initiatives.

Successful defense acquisition depends on careful thinking and sound professional judgments about the best acquisition strategy to use for a given product. Even more than Judgments about the best acquisition strategy to use for a given product. Even more man previous versions, this DoDI 5000.02 emphasizes tailoring of program structures, content, and decision points to the product being acquired. DoDI 5000.02 contains several program structure models instead of a single model. These models, however, are not alternatives from which a Program Manager must choose; they serve as examples and starting points that can and should be tailored to the actual product being acquired. Program Managers and Program Executive Officers should use these models as references to assist their thought processes and analysis of the best structure to use on a given program. Milestone Decision Authorities have been given

Better Buying Power is based on the concept of continuous process improvement. We will never stop learning from our experience, and we will never completely exhaust the potential for improvement in how we acquire weapons and other systems for the Department. Therefore, I do not consider this or any version of DoDI 5000.02 to be the final word on acquisition policy. I do not consider uns or any version of DADA 2000.02 to be the final word on acquismon poncy. In fact, I hope that some positive changes to this DoDI 5000.02 can be implemented soon. One of them, which we are working closely with the Congress on, is to simplify and rationalize the complex set of statutory requirements that have been levied on our managers over the past few decades. These burdensome and overlapping requirements are reflected in the dense tables in Enclosure 1. I am hopeful that a much shorter set of the tables in Enclosure 1 can be published as a result of our ongoing legislative initiative in acquisition reform that we are working in collaboration with Congress. I have also already initiated work on a new enclosure that will deal with the increasingly serious problem of designing for and managing cyber-security in our with the increasingly serious problem of designing for an amanaging cycle-security in our programs. We must do a better job of protecting our systems and everything associated with

DoDI 5000.02 provides policy guidance, but it is also a tool that should be used by acquisition professionals, and the operational, programming, and intelligence professionals we acquisition professionals, and the operational, programming, and interingence profession work with, to deliver products that meet our warfighters' needs and deliver value to the



### Structure

- Core Instruction
- •13 Enclosures
- •NOTE:

Acquisition of Services (2008 Enclosure 9) not yet canceled – but - will be a stand-alone DODI soon

#### Revised DoDI 5000.02 Structure

**Core Instruction - Operation of the DAS Enclosures** 

- **1.ACATS & Compliance Requirements**
- 2. Program Management
- 3. Systems Engineering
- 4.DT&E
- 5.OT and Live Fire Test and Evaluation
- 6.Life-Cycle Sustainment Planning
- 7. Human Systems Integration (HSI)
- 8. Affordability Analysis and Investment Constraints
- **9.Analysis of Alternatives**
- 10.Cost Estimating and Reporting
- 11.Requirements Applicable to All Programs Containing IT
- 12. Defense Business Systems (DBS)
- 13. Rapid Fielding of Capabilities



## **Key Changes**



### Summary of Major Changes - 1/3

- Provides 6 Pacquighton plagram madels as starting points for program tailoring
- Emphasizes the ability to tailor program strategies - de-emphasizes evolutionary acquisition (no longer the "preferred approach")
- Adds requirement for CONOPS/Operational Mode Summary/Mission Profile (CONOPS/OMS/MP) at MS A
- Deletes Technology Development Strategy (TDS) at MS A - adds Acquisition Strategy
- Incorporates several information elements under the Acquisition Strategy
- Add "framing assumptions" as a Milestone A requirement



### Summary of Major Changes - 2/3

- Renames中紀hf649分Developmen40件D) phase to Technology Maturation and Risk Reduction (TMRR) phase
- Adds CDD Validation and Development RFP Release Decision Points
- Eliminates Post PDR and Post CDR decision points
- New ACAT definitions
- Emphasizes Affordability Considerations
- EMD phase no longer divided into two "efforts"
- Adds provision for combining Milestones B and C for high cost first articles (e.g., ships, spacecraft) that do not produce EMD prototypes



## **Summary of Major Changes -** 3/3

- Configuration Steering Blanuary (%5B)<sup>2015</sup> program requirements under cognizance of the CSB after CDD validation yearly review at a minimum
- Adds a "Cyber Security Strategy" as Appendix to Program Protection Plan
- Adds "Intellectual Property Strategy" (summarized in Acquisition Strategy)
- Life Cycle Sustainment Plan (LCSP) required for all ACATs
- Additional emphasis on "should cost" management approach to identify and implement system/enterprise sustainment cost reduction efforts
- Identification of sustainment metrics (e.g.,



# How the Final Instruction Compares to the Interim Instruction (How much has changed?)

#### Instruction (Basic Process Description)

#### **Enclosures**

- 1. Acquisition Program Categories and Compliance Requirements
- 2. Program Management
- 3. Systems Engineering
- 4. Developmental Test and Evaluation (DT&E)
- 5. Operational and Live Fire Test and Evaluation (OT&E and LFT&E)
- 6. Life-Cycle Sustainment\*
- 7. Human Systems Integration (HSI)
- 8. Affordability Analysis and Investment Constraints
- 9. Analysis of Alternatives (AoA)
- 10. Cost Estimating and Reporting
- 11. Requirements Applicable to All Programs Containing Information Technology (IT)
- 12. Defense Business Systems (DBS)

LEGEND: Color Code Indicates the Degree of Change of Each Section

Black—Little Change

Blue—Moderate Change

Change

11



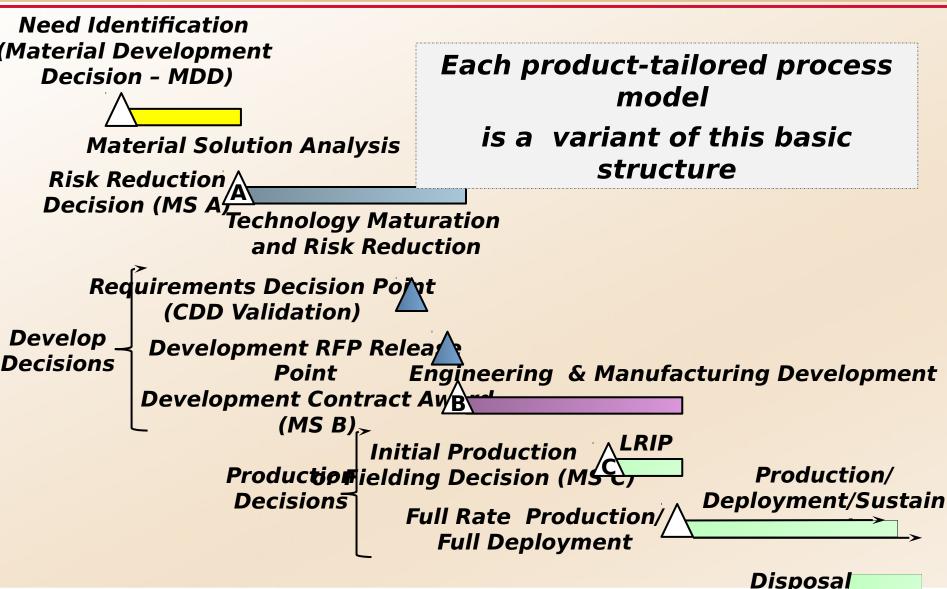
### Acquisition Program Categories

- New ACAT definitions based on FY2014 constant dollars
  - ACAT 1: > \$480M in RDT&E or \$2.79B in procurement
  - ACAT 2: > \$185M in RDT&E or \$835M in procurement
  - ACAT 1A: > \$40M, all expenditures in single year > \$165M, all expenditures from Materiel Solution Phase to deployment > \$520M, all expenditures from Materiel Solution Phase to estimated useful life of the system
- "One stop shopping" for Category and Compliance information in tabular format in Enclosure 1
  - Consolidates information from various locations in prior 5000.02 and other regulations



Version 3.8, 7-18-14

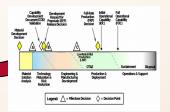
# Generic Acquisition and Procurement Milestones and Decision Points



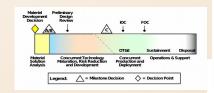


# The Tailoring Process ..... Ask:

What model best accommodates the product being developed What business procedures apply to the product being developed.







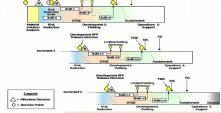


Table 2. Milestone and Phase Information Requirements														
	PR	OKCRIAI	M Tryme	Elle .				UFE-CYC	LEEV	DATE				
INFORMATION REQUIREMENT	-	MODEL MADE ACAT MOD A VID SEP Red SH C Dec OTHER SOURCE APPROVALABILITIES												
	WORLD				_									
2395ab CERTIFICATION	-	This instruction												
MEMORANDUM	- month 100 to	STATUTORY for MEAPs at Milestones A and B. The MDA does not have authority to delegate this requirement. The associated procedures from 10 U.S.C. 23666 (Reference July) are re-stated in the Defence Acquisition Guidelaco												
Acquisition Decision Memorandum	-	* * * * * * * * * * This instruction MSA.											MCA.	
(ADM)	Regulat	Regulatory. Documents MDA decisions and direction.												
ACQUIRATION PROGRAM BASELINE	-													
(APB)	STATUTORY for MDAPs at Milestones B and C and the PRP decision, a Regulatory requirement at all other Type/Event combinations, including the required draft at Development RPP Release. The what is approved at Milestone B. See section 4 in this enclosure for requirements at other than the identified decision points. The MDA may approve the APS for some ship programs at Milestone A.													
	-	SEC. 803, P.L. 107-314 (Ref. (pt)) Core instruction, para. 5.d.(2)(c) MDA.  107.314 (Ref. (pt)) MDA.												
ACQUISITION STRATEGY	STATUTORY for MDAPs at Milectone A; else Regulatory at other events and for other program types. The Acquisition Strategy will include STATUTORY and Regulatory information.  - Use the "Acquisition Strategy Culture" at https://doc.doc.org/statuto/PDACOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCO													
	For OBS, prepare an Acquisition Approach as part of the Business Case instead of an Acquisition Strategy (further described in paragraph 5.a.(1) in Enclosure 12 of this instruction).     For programs responding to Uncert Needs, see Table 10 in Enclosure 13.													
<ul> <li>For programs responsing to Legent Necess, see Taker 10 in Crisiosare 13.</li> <li>For JUDNs, Warfighter SiG ungent needs, Secretary of Defense RAA determinations, or DoD Component UONs (when requested for UONs), a copy of the shallegy is due to the Director, JRAC, within 3 business days of MDA approval.</li> </ul>														
Table Notes:  1. A sot (*) in a cell indicates the specific a and life-cycle exent, and represents their across a new, a checkmant (*) indicates.  2. All of the "Life-Cycle Exects" will not reco	which pulper the requir		or upo	ment.	Maring Company	mark.	4. 6	distriction levelopme des accur	remain on Fifth		that have to Decisions, update	been fine a Point d of docum	e submitted no later than 45 business day slight and approved by the responsible out a not have to be no unabmitted prior to Miles ents will be provided.	northy in support of the

What statutes and regulations apply to your program ACAT and MSs

What functional policies relate to the program? (i.e., PMASys Engineering, DT&E, OT&E, Sustainment, Affordability, IT and Clinger-Cohen, DBS,

# Accommodating Changes to the Acquisition Strategy

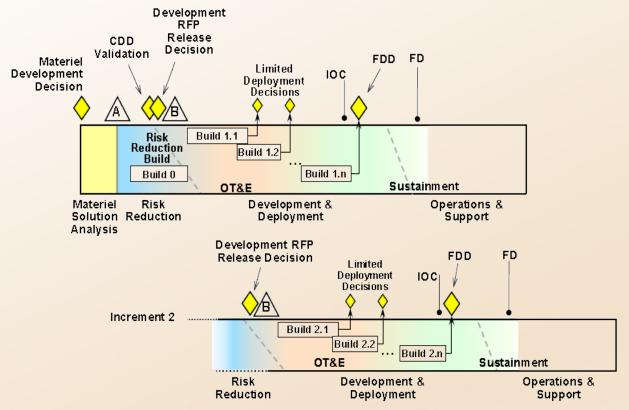
#### Per USD(AT&L):

... Acquisition Strategies are baseline plans for the execution of the program and should be prepared and submitted in time to obtain approval to support more detailed planning and the preparation of Requests for Proposal. The Acquisition Strategy is an approved plan; it is not a contract. Minor changes to the plan reflected in the Acquisition Strategy due to changed circumstances or increased knowledge are to be expected and do not require MDA pre-approval. Major changes, such as contract type or basic program structure, do require MDA approval prior to implementation. All changes should be noted and reflected in an update at the next program decision point or milestone. ...



## Model 3: Incrementally Deployed Software Intensive Program

#### (d) Model 3: Incrementally Deployed Software Intensive Program



This model is distinguished from the previous model by the rapid delivery of capability through multiple acquisition increments, each of which provides part of the overall required program capability. Each increment may have several limited deployments; each deployment will result from a specific build and provide the user with a mature and tested sub-element of the overall incremental capability. Several builds and deployments will typically be necessary to satisfy approved requirements for an increment of capability. The identification and development of technical solutions necessary for follow-on capability increments have some degree of concurrency, allowing subsequent increments to be initiated and executed more rapidly.



# Special Meaning of "Limited Deployment"

While "Limited Deployments" may be planned for all software intensive and/or IT programs, the term takes on special meaning when a program structure is based on Model 3.

- Within an increment of capability planned for Model 3, the PM may plan for several Limited Deployments of that capability.

  Each limited deployment results from a specific build, and provides the user "a mature and tested sub-element of the overall incremental capability." Limited deployments cease with the Full Deployment Decision.
- As a result of several limited deployments of capability per increment, Model 3 does not include a Milestone C decision point.

. . .

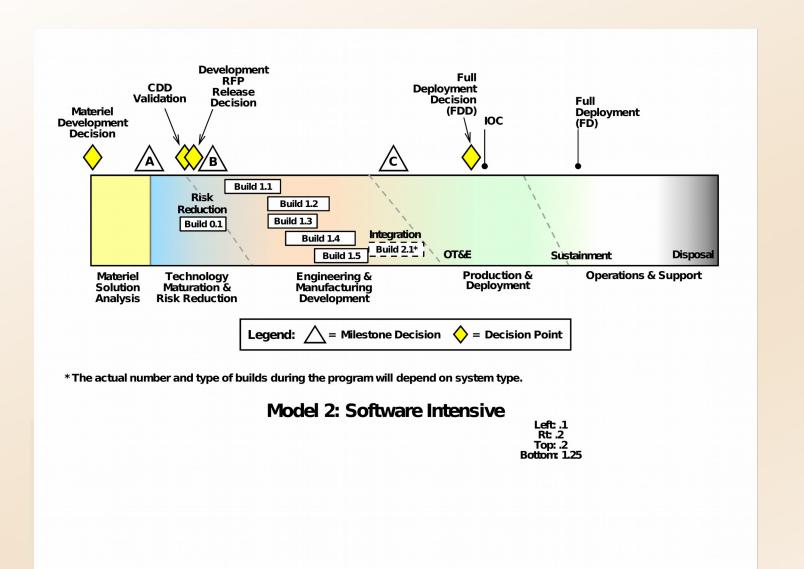
In contrast to the multiple "Limited Deployments" of capability in

Model 3, when applied to other Software Intensive (Model 2) or Software Dominant (Model 6) program structures, Limited Deployment implies deployment of the full capability

The Meaning of "Limited Deployment" is Contextually Dependent



# Model 2: Defense Unique Software Intensive Program





## **Changes to the Tables in Enclosure**1

- Deleted 7 rows from Table 2, Milestone and Phase Information Requirements:
  - Business Case
  - Business Process Engineering (still required as part of CCA Compliance)
  - Corrosion Prevention and Control Plan
  - Independent Risk Assessment
  - Orbital Debris Mitigation Risk Report
  - Post-System Functional Review Report
  - Program Charter
- Added 1 row to Table 2:

Waveform Assessment Application—Required by DoDI 4630.09

- Added 2 rows to Table 6, Exceptions, Waivers, and Alternative Management and Reporting Requirements:
  - Congressional Notification of MDAP Subprogram Designation(s)
  - Management of Joint DoD and Director of National Intelligence (DNI) Programs



## Strategy (AS) in Table 2

Table 2. Milestone and Phase Information Requirements

	PRO	OGRAM	TYP	E1			LIF	E-CYCI	E EVE	NT1,2,3	3			
INFORMATION REQUIREMENT	MDAP	MAIS		CAT ≤ III	MDD	MS A	CDD Val	Dev RFP Rel	MS B <sup>5</sup>	MS C	FRP/FD Dec	OTHER	SOURCE	APPROVAL AUTHORITY
ACQUISITION STRATEGY	•	•	•	•		•		•		1	1		SEC. 803, P.L. 107-314 (Ref. (i)) Para. 6a of Enc. 2 of this instruction	MDA

STATUTORY for MDAPs at Milestone A; Regulatory for all other program types at all marked events including MDAPs after Milestone A. The Acquisition Strategy will include STATUTORY and Regulatory information. Major changes to the plan reflected in the Acquisition Strategy:

- BENEFIT ANALYSIS AND DETERMINATION: STATUTORY; applies to bundled acquisitions only. Includes MARKET RESEARCH to determine whether consolidation of the requirements is necessary and justified. Required at Milestone C if there was no Milestone B; an update is not requirement at the FRP/FD decision point. 15 U.S.C. 632 (Reference (j)) defines a bundled contract that is entered into to meet requirements that are consolidated in a bundling of contract requirements. The term "bundling of contract requirements" means consolidating two or more procurement requirements for goods or services previously provided or performed under separate smaller contracts into a solicitation of offers for a single contract that is likely to be unsuitable for award to a small-business concern. SOURCE(S): 15 U.S.C. 644(e) (Ref. (j)), 15 U.S.C. 657q (Ref. (j))
- <u>CONSIDERATION OF TECHNOLOGY ISSUES</u>: STATUTORY. Promotes, monitors, and evaluates programs for the communication and exchange of technological data. Not required below ACAT II nor after the Development RFP Release. For urgent needs, expedited consideration of technology issues will be reviewed during the COURSE OF ACTION ANALYSIS. SOURCE(S): 10 U.S.C. 2364 (Ref. (g))
- CONTRACT-TYPE DETERMINATION: STATUTORY. Satisfied when the MDA approves the Acquisition Strategy with specified contract types. Only required for MDAPs at Development RFP Release and Milestones B and C. The MDA for an MDAP may conditionally approve the contract type selected for a development program at the Development RFP Release Decision Point, and give final approval at the time of Milestone B approval. The development contract type must be consistent with the level of program risk and may be either a fixed price or cost type contract. If selecting a cost-type contract, the MDA must comply with the conditions and reporting requirements listed in Table 6 in this enclosure. The DoD MAY NOT enter into cost-type contracts for production of an MDAP unless compliant with the conditions and notifications listed in Table 6. SOURCE(S): SEC. 818, P.L. 109-364 (Ref. (k)), SEC. 811, P.L. 112-239 (Ref. (l))
- COOPERATIVE OPPORTUNITIES: STATUTORY. Only due at the first program milestone review. The requirement for a Cooperative Opportunities Document will be satisfied via the International Involvement section in the Acquisition Strategy outline. For programs responding to urgent needs, proven capabilities will be assessed during the COURSE OF ACTION ANALYSIS. SOURCE(S): 10 U.S.C. 2350a (Ref. (g)), SEC. 243, P.L. 111-383 (Ref. (m))
- GENERAL EQUIPMENT VALUATION: STATUTORY; a program description that identifies contract-deliverable military equipment, non-military equipment, and other deliverable items; includes plan(s) to ensure that all deliverable equipment requiring capitalization is serially identified and valued. Only required at Milestone C; updated as necessary for the FRP/FD Decision. The capitalization thresholds are unit costs at or above \$1 million for Air Force and Navy general fund assets, and unit costs at or above \$250 thousand for all internal use software and for other equipment assets for all other general and working capital funds. SOURCE(S): P.L. 101-576 (Ref. (n)), Statement of Federal Financial Accounting Standards 23 (Ref. (o))
- INDUSTRIAL BASE CAPABILITIES CONSIDERATIONS: STATUTORY for MDAPs; Regulatory for others. Summarizes the results of the industrial base capabilities' analysis. SOURCE(S): 10 U.S.C. 2440 (Ref. (g))
- INTELLECTUAL PROPERTY (IP) STRATEGY: STATUTORY for major weapon systems and subsystems; Regulatory for other program types. The IP Strategy must be updated as appropriate to support and account for evolving IP considerations associated with the award and administration of all contracts throughout the system life cycle. Becomes part of the Life-Cycle Sustainment Plan (LCSP) during Operations and Support (O&S). For programs responding to urgent needs, due at the Development Milestone. SOURCE(S): 10 U.S.C. 2320 (Ref. (g)), Para. 6a(4) of Enclosure 2 of this instruction
- MARKET RESEARCH: STATUTORY. A stand-alone, Regulatory requirement at MDD. STATUTORY updates (as part of the ACQUISITION STRATEGY) required at Milestone A and the Development RFP release point; not required thereafter. Conducted to reduce the duplication of existing technologies and products, and to understand potential materiel solutions, technology maturity, and potential sources, to assure maximum participation of small business concerns, and possible strategies to acquire them. For programs responding to urgent needs, included in the Course of Action Approach at the Development Milestone. SOURCE(S): 10 U.S.C. 2377 (Ref. (g)), 15 U.S.C. 644(e)(2) (Ref. (j)), This instruction
- SMALL BUSINESS INNOVATION RESEARCH (SBIR)/SMALL BUSINESS TECHNOLOGY TRANSFER (STTR) PROGRAM TECHNOLOGIES: STATUTORY. Program managers will establish goals for applying SBIR and STTR technologies in programs of record and incentivize primes to meet those goals. For contracts with a value at or above \$100 million, program managers will establish goals for the transition of Phase III technologies in subcontracting plans and require primes to report the number and dollar amount of Phase III SBIR or STTR contracts. Not required at Milestone B. SOURCE(S): 15 U.S.C. 638 (Ref. (j))
- TERMINATION LIABILITY ESTIMATE: STATUTORY. Only for MDAPs. Must be documented in the ACQUISITION STRATEGY for any contract for the development or production of an MDAP for which potential termination liability could reasonably be expected to exceed \$100 million. Updates may therefore be required at other than the marked events. The estimate must include how such termination liability is likely to increase or decrease over the period of performance. The Program Manager must consider the estimate before making recommendations on decisions to enter into or terminate such contracts. SOURCE(S): SEC. 812, P.L. 112–239 (Ref. (I))

Table revised to show alignment of selected statutory requirements with the AS. All of these requirements are addressed in the AS.



### Operational Mode Summary/Mission Profile (OMS/MP)

#### Document Re-Titled

Table 2. Milestone and Phase Information Requirements, continued

	PR(			LIF	E-CYCI	LE EVE	NT1,2,3	1						
INFORMATION REQUIREMENT	MDAP	MAIS	A(	CAT  ≤ III	MDD	MS A	CDD Val	Dev RFP Rel	MS B <sup>5</sup>	MS C	FRP/FD Dec	OTHER	SOURCE	APPROVAL AUTHORITY
Concept of Operations/Operational Mode Summary/Mission Profile (CONOPS/OMS/MP)	•	•	•	•		•		<b>✓</b>		<b>~</b>			JCIDS Manual (Ref. (r))	DoD Component

Regulatory. The CONOPS/OMS/MP is a Component approved acquisition document that is derived from and consistent with the validated/approved capability requirements document. The CONOPS/OMS/MP describes the operational tasks, events, durations, frequency and environment in which the materiel solution is expected to perform each mission and each phase of the mission. The CONOPS/OMS/MP will be provided to the MDA at the specified decision events and normally provided to industry as part of the RFP.

Regulatory. The CONOPS/OMS/MP is a Component approved acquisition document that is derived from and consistent with the validated/approved capability requirements document. The CONOPS/OMS/MP describes the operational tasks, events, durations, frequency and environment in which the materiel solution is expected to perform each mission and each phase of the mission. The CONOPS/OMS/MP will be provided to the MDA at the specified decision events and normally provided to industry as part of the RFP.



#### No Change to the Programmatic Environment, Safety, and Occupational Health Evaluation Row

Table 2. Milestone and Phase Information Requirements, continued

PESHE AND NEPA/E.O. 12114 COMPLIANCE  MDAP MAIS ACAT   MDD MS   CDD   MS   CDD   RFP   Rel   MS   S   C   FRP/FD   OTHER   SOURCE   AUTHORIT		PRO	OGRAM	TYPE	1			LIFE	-CYCL	E EVE	NT1,2,3				
	INFORMATION REQUIREMENT	MDAP	MAIS			MDD	MS A		RFP	MS B <sup>5</sup>	MS C	FRP/FD Dec	OTHER	SOURCE	APPROVAL AUTHORITY
SCHEDULE	PESHE AND NEPA/E.O. 12114 COMPLIANCE SCHEDULE	•	•	•	•					•	✓	✓		42 U.S.C. 4321-4347 (Ref. (ag)) E.O. 12114 (Ref. (ah))	CAE or as delegated

STATUTORY. The Programmatic Environment, Safety, and Occupational Health Evaluation (PESHE) and National Environmental Policy Act (NEPA) / Executive Order (E approved by the CAE. Related design considerations must be included in the SEP; related operations or sustainment considerations after Milestone C will be included programs with no hardware component.

14 Compliance Schedule is P. Not required for software

#### No Change:

"Not required for software programs with no hardware component."

# Streamlined Clinger-Cohen Act (CCA) Compliance

#### **ENCLOSURE 11**

#### 3. CCA COMPLIANCE

- a. ... the DoD Component will not award a contract for the applicable acquisition phase until:
- (1) The sponsoring DoD Component or program manager has satisfied the applicable acquisition phase-specific requirements of the CCA as shown in Table 9 in Enclosure 1 of this instruction; and
- (2) The Program Manager has **reported** CCA compliance to the MDA and the DoD Component Chief Information Officer (CIO), or their designee.
- b. The Component CIO, ..., will record the CCA compliance in the DITPR upon program initiation and at subsequent major decision points, and in the AIR, as required.
- c. ... To report compliance, the Program
  Manager will prepare a table similar to Table 9 to
  indicate which documents demonstrate compliance
  with the CCA requirements. DoD Component ClOs,
  or their designee, will use the documents cited in the
  table prepared by the table prepared by table

Note From Table 2: STATUTORY for all programs that acquire information technology (IT); Regulatory for other programs. See section 3 in Enclosure 11 for amplifying guidance. A summary of required actions is in Table 9 in this enclosure. The Program Manager will report CCA compliance to the MDA and the Component CIO or designee. For IT programs employing an incremental development model (i.e., Model 3), the Program Manager will report CCA compliance at each Limited Deployment Decision

#### **ENCLOSURE 1**

#### Table 9. CCA Compliance

Actions Required to Comply With the CCA (Subtitle III of title 40 of U.S. Code (Reference (p))) <sup>1</sup>	Applicable Program Documentation <sup>2</sup>
<ol> <li>Make a determination that the acquisition supports core, priority functions of the DoD.<sup>3</sup></li> </ol>	ICD, IS ICD, Problem Statement for a DBS, or urgent need requirements documents
<ol> <li>Establish outcome-based performance measures linked to strategic goals.<sup>3,4</sup></li> </ol>	ICD, IS ICD, CDD, CPD, AoA, APB
Redesign the processes that the system supports to reduce costs, improve effectiveness and maximize the use of commercial off-the-shelf technology. <sup>9, 4</sup>	ICD, IS ICD, Concept of Operations, AoA, Business Process Reengineering
4. Determine that no private sector or government source can better support the function $^{4.5}$	Acquisition Strategy, AoA
<ol> <li>Conduct an analysis of alternatives.<sup>4, 5</sup></li> </ol>	AoA
Conduct an economic analysis that includes a calculation of the return on investment; or for non-AIS programs, conduct a life-cycle cost estimate. <sup>6, 5</sup>	Component Cost Estimate, Program Economic Analysis for MAIS programs
<ol> <li>Develop clearly established measures and accountability for program progress.<sup>4</sup></li> </ol>	Acquisition Strategy, APB, TEMP
Ensure that the acquisition is consistent with the DoD Information Enterprise policies and architecture, to include relevant standards. <sup>4</sup>	CDD NR-KPP, CPD NR-KPP, ISP
Ensure that the program has a Cybersecurity Strategy that is consistent with DoD policies, standards and architectures, to include relevant standards. <sup>4</sup>	Cybersecurity Strategy, Program Protection Plan, Risk Management Framework Security Plan
10. Ensure, to the maximum extent practicable, (1) modular contracting has been used, and (2) the program is being implemented in phased, successive increments, each of which meets part of the mission need and delivers measurable benefit, independent of future increments. <sup>4</sup>	Acquisition Strategy
11. Register Mission-Critical and Mission-Essential systems with the DoD CIO.4,6	DoD Information Technology Portfolio Repository

- Table 2 in this enclosure indicates when the program manager must report CCA compliance.
- 2. The system documents/information cited are examples of the most likely but not the only references for the required information. If other references are more appropriate, they may be used in addition to or instead of those cited. Include page(s) and paragraph(s), where appropriate. Urgent needs may cite the associated urgent needs documentation to demonstrate CCA compliance, e.g., the Course of Action and/or the network connection documentation.
- These requirements are presumed to be satisfied for weapons systems with embedded IT and for Command and Control Systems that are not themselves IT systems.
- These actions are also required to comply with section 811 of Public Law 106-398 (Reference (q)).
- 5. For NSS, these requirements apply to the extent practicable (40 U.S.C. 11103 (Reference (p)) discusses NSS).
- 6. <u>Mission-Critical Information System</u>. A system that meets the definitions of "information system" and "national security system" in the Clinger-Cohen Act (Subtitle III of title 40 of U.S. Code (Reference (p))), the loss of which would cause the stoppage of warfighter operations or direct mission support of warfighter operations. (The designation of mission critical will be made by a DoD Component head, a Combatant Commander, or their designee. A financial management IT system will be considered a mission-critical IT system as defined by the Under Secretary of Defense (Comptroller) (USD(C)).) A "Mission-Critical Information Technology System" has the same meaning as a "Mission-Critical Information System".

Mission-Essential Information System. A system that meets the definition of "information system" in 44 U.S.C. 3502 (Reference (aw)), that the acquiring DoD Component Head or designee determines is basic and necessary for the accomplishment of the organizational mission. (The designation of mission-essential will be made by a DoD Component head, a Combatant Commander, or their designee. A financial management IT system will be considered a mission-essential IT system as defined by the USD(C).) A "Mission-Essential Information Technology System" has the same meaning as a "Mission-Essential Information System."



# Defense Business Systems (DBS) Problem Statements

- Deletion of the Business Case reinforced the need for and extended the purpose of the Problem Statement
- The Problem Statement will document evolving requirements alike an ICD and CDD
- 4. <u>DBS PROBLEM STATEMENT</u>. DBS generally do not employ Joint Capabilities Integration and Development System procedures for the development and validation of capability requirements documents. Instead functional sponsors will analyze a perceived business problem, capability gap, or opportunity and document the results in a Problem Statement. The Problem statement will include measurable business outcomes, a rough order of magnitude cost estimate and projected/anticipated financial return measures such as net present value, payback or return on investment.
- a. The DBS Problem Statement must be reviewed by the IRB and approved by the IRB chair. Analysis supporting the Problem Statement will be forwarded to the IRB and the Joint Staff for review.
- b. The Problem Statement will be refined over time to inform post-MDD decision making. The final Problem Statement will be reviewed by the IRB and approved by the IRB chair prior to the Development RFP Release Decision point.
- c. Approved Problem Statements will be submitted to the MDA 30 days prior to the MDD and any subsequent decision point where they are required.
- d. The Joint Requirements Oversight Council (JROC), on advice of the J-8 and the Functional Capabilities Board, will have authority to review Problem Statements to determine if JROC interest exists.



## New Policy for Cloud Computing

#### **ENCLOSURE 11**

9. <u>CLOUD COMPUTING</u>. Cloud computing services can deliver more efficient IT than traditional acquisition approaches. Program managers will acquire DoD or non-DoD provided cloud computing services when the business case analysis determines that the approach meets affordability and security requirements. Program managers will ensure that cloud services are implemented in accordance with Defense Information Systems Agency (DISA) provided Cloud Computing Security Requirements Guidance; and will only use cloud services that have been issued both a DoD Provisional Authorization by DISA and an Authority to Operate by their Component's Authorizing Official. In addition, non-DoD cloud services used for Sensitive Data must be connected to customers through a Cloud Access Point that has been approved by the DoD CIO. Program managers report cloud service funding investments through the submission of the Office of Management of Budget (OMB) Exhibit 53 in accordance with OMB Circular A-11(Reference (c)).



# Applicable to the Acquisition System

- NDAA signed too late to be incorporated in DoDI 5000.02 without additional coordination
- Priority was to get the final DoDI 5000.02 to the community
- FY 15 NDAA requirements include:
  - § 213. Revision Of Requirement For Acquisition Programs To Maintain Defense Research Facility Records. Removes statutory direction to make any position paper by a Defense research facility be made a part of the records
  - § 801. Modular open systems approaches in acquisition programs. Requires IT programs to include open systems approaches to the maximum extent possible or to provide written justification in the contract file detailing why not used, and defines open systems approach.
  - § 802. Recharacterization of changes to MAIS programs. Amends 10 USC 2445c: Changes MAIS failure to achieve FDD within 5 years after Milestone A from "Critical" change to a "Significant" change.
  - § 803. Amendments relating to defense business systems. Defines "business process mapping," and makes it a required component of BPR. DBS now exclude commissary systems, exchange systems, or other systems for MWR using non-appropriated funds.
  - § 816. Restatement and revision of requirements applicable to multiyear defense acquisitions to be specifically authorized by law. Reviewed by DCAPE; appears to be minor procedural changes.
  - § 831. Chief Information Officer authority enhancements. Requires the DoD CIO to certify that IT investments adequately implement incremental development.
  - § 901. Reorganization of the Office of the Secretary of Defense and Related Matters. Effective 2/1/17, creates USD(Business Management and Information); the USD(BMI) is the CIO. Enacts 10 USC 142 about the CIO; disestablishes the DBSMC; assigns DBSMC duties to the IRB; and creates new ASD(Energy, Installations, and Environment)

<sup>\*</sup> Unless otherwise noted, all requirements are effective 12/19/2014 (P.L. 113-291)

# RFP Release Point Document Approval Authority

#### At The Development RFP Release Decision Point:

"In Table 2, when applied to requirements associated with the Development RFP Release Decision Point, the modifier "draft" will mean a Program Manager-, Program Executive Officer- (PEO), and CAE-approved draft subject to change based on results of the source selection process and pre-Milestone B Component and OSD staff coordination."



# Increased Emphasis on the Threat

Reconsidered at each Milestone Decision Point—For Example:

"In making Milestone C <u>and Limited Deployment</u> decisions, the MDA will consider any new validated threat environments that were not included in the CPD and might affect operational effectiveness, and will consult with the requirements validation authority as part of the production decision making process to ensure that capability requirements are current."

 Identified as a consideration during Configuration Steering Boards (CSBs):

"The Program Manager, in consultation with the PEO and the requirements sponsor, will, on at least an annual basis, identify and propose to the CSB a set of recommended requirements changes to include descoping options that reduce program cost and/or moderate requirements and changes needed to respond to any threat developments. These options will be presented to the CSB with supporting rationale addressing operational implications. ..."

## Treatment of the Intellectual Property (IP) Strategy

#### From the Acquisition Strategy Row in Table 2:

INTELLECTUAL PROPERTY (IP) STRATEGY: STATUTORY for major weapon systems and subsystems; Regulatory for other program types. The Intellectual Property (IP) Strategy must be updated as appropriate to support and account for evolving IP considerations associated with the award and administration of all contracts throughout the system life cycle. Becomes part of the Life-Cycle Sustainment Plan (LCSP) during Operations and Support (O&S). For programs responding to urgent needs, due at the Development Milestone.

SOURCE(S): 10 U.S.C. 2320 (Ref. (g)), Para. 6.a(4) of Enclosure 2 of this instruction

#### From Enclosure 2, Program Management:

6.a.(4) Intellectual Property (IP) Strategy and Open Systems Architectures. ... The IP Strategy will be updated throughout the entire product life cycle, summarized ininitially as part of the Acquisition Strategy, and presented with during the Operations and Support Phase as part of the Life-Cycle Sustainment Plan-during the 99

# Program Support Assessments (PSAs)

#### From Enclosure 3, Systems Engineering:

20. PROGRAM SUPPORT ASSESSMENTS (PSAs). The Office of the DASD(SE) will conduct independent, cross-functional PSAs of programs' MDAPs and MAIS programs, and other program's as directed by the DAE, to assess technical management and systems engineering progress and plans, with support from other DoD organizations. PSAs are for the purpose of assisting program managers' technical planning, and to improve execution by sharing best practices and lessons learned from other programs.



# Rapid Fielding (Enclosure 13)

- Urgent Operational Needs include:
  - -- Joint Urgent Operational Needs (JUONs) and Joint Emergent Operational Needs (JEONs). These are either an urgent need identified by a Combatant Commander, the CJCS, or the VCJCS involved in an ongoing contingency operation (i.e. a JUON) or an emergent need identified by a Combatant Commander, CJCS, or VCJCS for an anticipated or pending contingency operation (i.e. a JEON). For JUONs and JEONs, the validation approval will be by the Joint Staff in accordance with JCIDS detailed in CJCSI 3170.01H. Program execution for JUONs and JEONs will be assigned in accordance with DoDD 5000.71. The MDA for JUONs and JEONs will be determined at the DoD Component level except in very rare cases when the MDA will be designated in an ADM by the DAE.
  - -- <u>DoD Component-specific UON.</u> These are defined in CJCSI 3170.01H and further discussed in DoDD 5000.71. Approval authorities for DoD Component UONs, including their validation, program execution, and the designation of the MDA, will be at the DoD Component level.
  - A Warfighter Senior Integration Group (SIG)-Identified Urgent Issue. This is a critical warfighter issue, e.g. materiel support to a coalition partner, identified by the Co-Chairs of the Warfighter SIG in accordance with
  - DoDD 5000.71. The Co-Chairs of the Warfighter SIG will approve <u>a critical warfighter issue</u> <u>statement</u> and provide instructions to DoD Component(s) on program execution and management.
  - A Secretary of Defense Rapid Acquisition Authority (RAA) Determination. This is a Secretary of Defense signed determination that is made in response to a documented deficiency following complete the deficiency following waiver of a law, policy, directive, or regulation will greatly accelerate the delivery of effective coloring the mation of the mat



### **Key OT&E Changes**

- Clarified use of TEMP at Milestone-A (and general TEMP approval process) for DOT&E oversight systems
  - Designate the lead OTA as the coordinator of CONOPS discussion in MS A TEMP [5.d.(1)]
- Added discussion of use of Scientific Test and Analysis Techniques throughout T&E Program Planning [5.e.]
- Revised Modeling and Simulation (M&S) discussion [6.d.]
  - Require any M&S that utilize or portray threat characteristics or parameters must have that portrayal accredited by the Defense Intelligence Agency
  - For programs under DOT&E oversight, its use for the operational evaluation will be approved by DOT&E
- Clarified Integrated Testing [11.a.(4)]
  - DOT&E must approve OTAs plan for use of integrated testing data before the start of testing; approval will be based on understanding of the realism of the test scenario(s) used and the pedigree (test conditions and methodologies) of the data
- Substantive revision to discussion of OT&E of software
  - Use of Operational Assessments (OA) for Incrementally Deployed Software Intensive Program model [6.a.(2)]; all limited deployments require OT or OA [7.d.(3)]
  - Includes Human-Systems Interface (HIS) assessment and realistic test environment [7.a.]
  - OTA requires DOT&E coordination on the required level of test at all levels of risk [7.d.(2)]

Added discussion that cybersecurity testing applies to all systems not just

## **Acquisitions of Services**

- Enclosure 9 of the 2008 DoDI 5000.02 remains applicable to Acquisitions of Services
- New DRAFT DoDI 5000.xx for Services in Final Review
- DoDI 5000.02 is applicable to IT Services that achieve the MAIS threshold

## **Continuous Improvement**

- Legislative Proposals
- FY 2015 National Defense Authorization Act Implementation
- Immediate Actions Resulting from Better Buying Power (BBP) 3.0
- Document Outlines
- Defense Acquisition Guidebook (DAG)
- . . . and more



# Points of Contact for DAU

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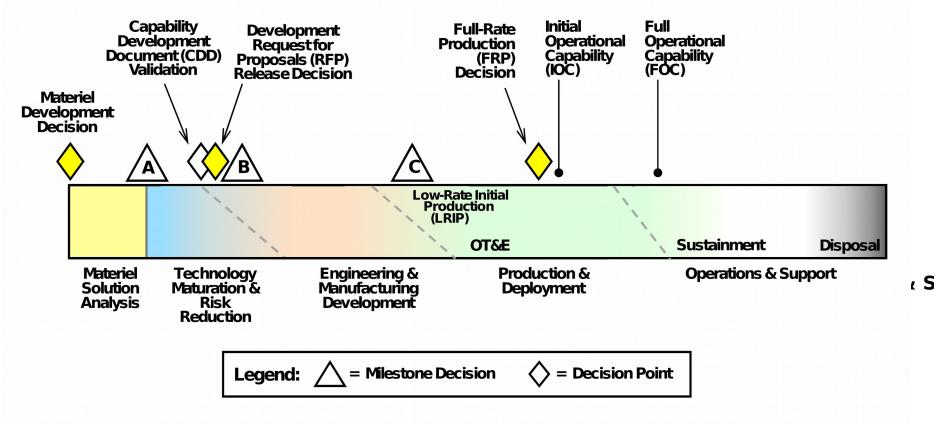
## BACKUP (More detailed information)

# **Product-Tailored Acquisition Models**

- Model 1: Hardware Intensive Program
- Model 2: Defense Unique Software Intensive Program
- Model 3: Incrementally Fielded Software Intensive Program
- Hybrid Program A (Hardware Dominant)
- Hybrid Program B (Software Dominant)
- Model 4: Accelerated Acquisition Program

## **Model 1: Hardware (HW) Intensive Program**

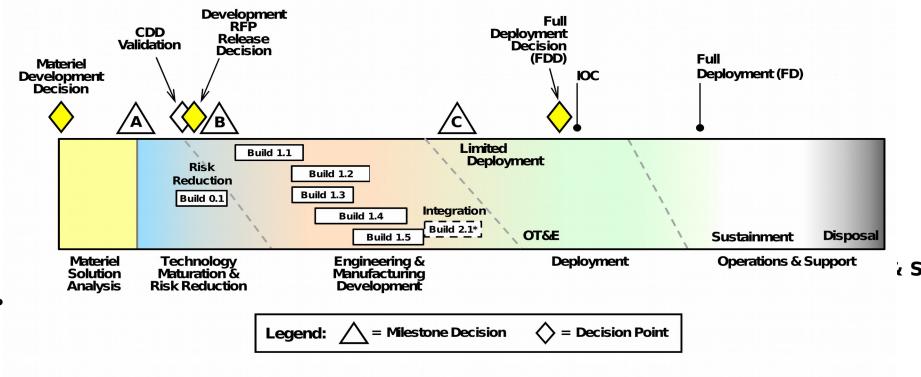
The "starting point" for most military weapon



previous editions of DoDI 5000.02

 NOTE: These products almost always contain SW development resulting in some form of Hybrid Model A

#### **Model 2: Defense Unique Software (SW) Intensive**

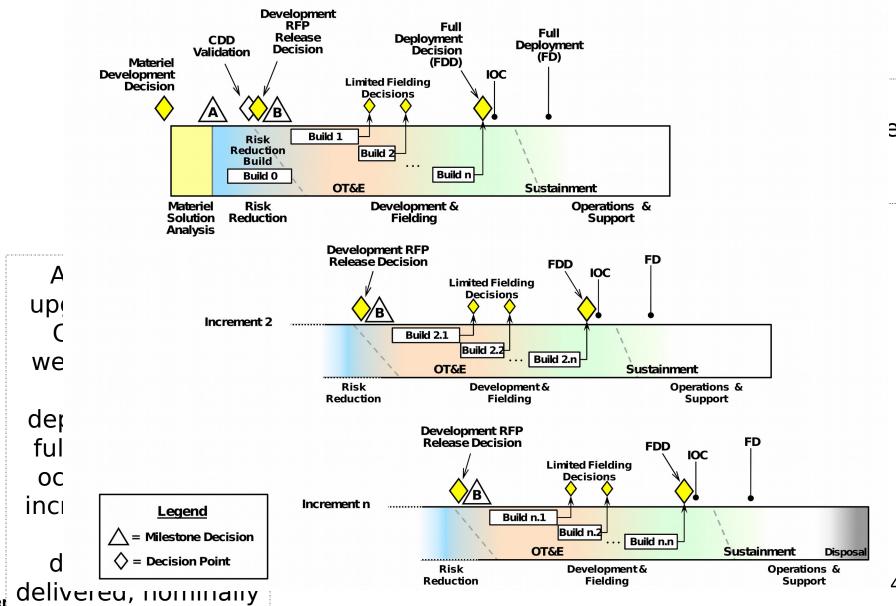


<sup>\*</sup>The actual number and type of builds during the program will depend on system type.

- The central feature of this model is the planned SW "builds" (Testable, integrated subsets of the overall capability)
- Example systems might include military Command & Control systems and significant upgrades to the combat systems found on major weapons systems such as surface combatants and tactical aircraft.

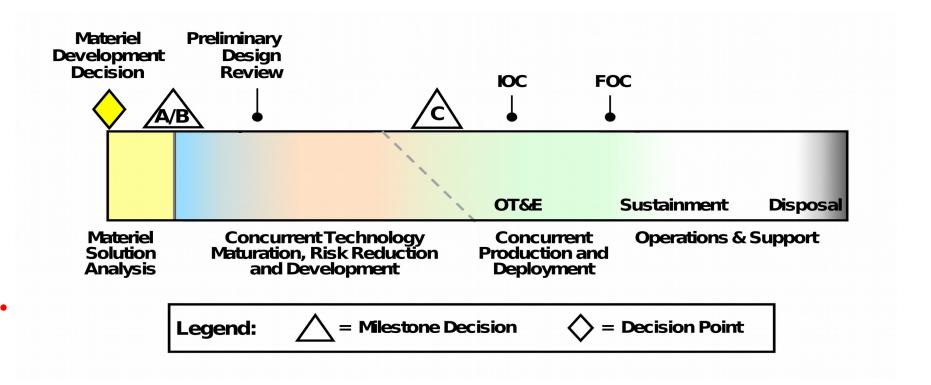
# Model 3: Incrementally Fielded SW Intensive

Distinguished from Model 2 by papid delivery of capability through multiple increments, each providing part of overall program capability.

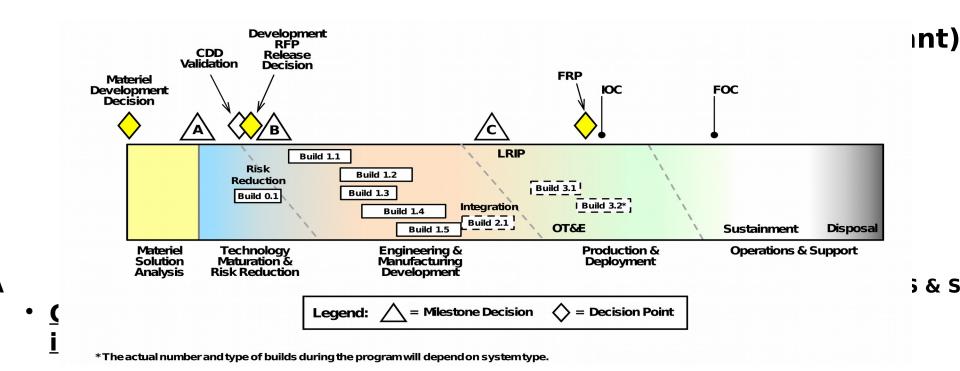


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# **Model 4: Accelerated Acquisition Program**



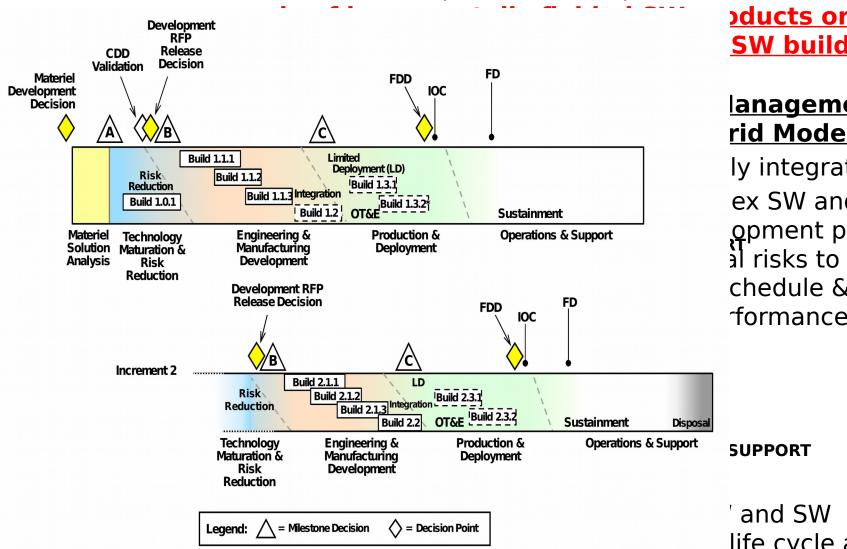
- Compresses or eliminates phases of the process in order to achieve a deployed capability on a compressed schedule. The model shows one example of tailoring for accelerated acquisition and many others are possible
- For products that must be developed and acquired as quickly as possible, <u>usually motivated by a potential adversary achieving</u>
   versitechnelogical surprise, and featuring a greater acceptance of program



- The design, fabrication, and testing of physical prototypes may determine overall schedule, but <u>SW development will often dictate</u> <u>the pace of program execution</u> and must be tightly integrated and coordinated with HW development decision points
- <u>SW development is a series of testable software builds</u> leading to the full capability needed to satisfy program requirements and IOC.
- MS B and MS C decisions should include SW functional capability verside yelopment maturity criteria as well as demonstrated technical

# **Model 6: Hybrid Program B (SW Dominant)**

A SW intensive product development that includes <u>a</u>



oducts or **SW** builds

#### <u>lanagement in</u> rid Models:

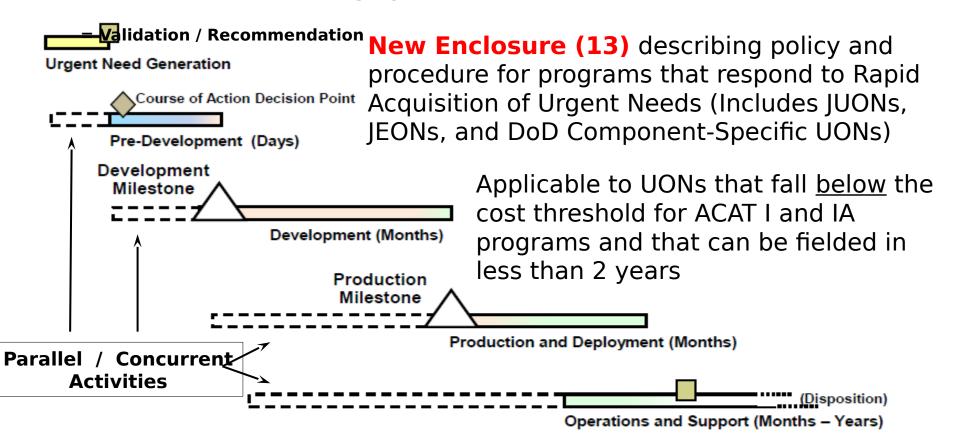
ly integrated ex SW and HW opment poses il risks to cost, chedule & formance.

life cycle and

will be a topic of special interest at all decision points and milestones

# **Rapid Fielding of Capabilities**

General, Highly Tailorable Acquisition Model

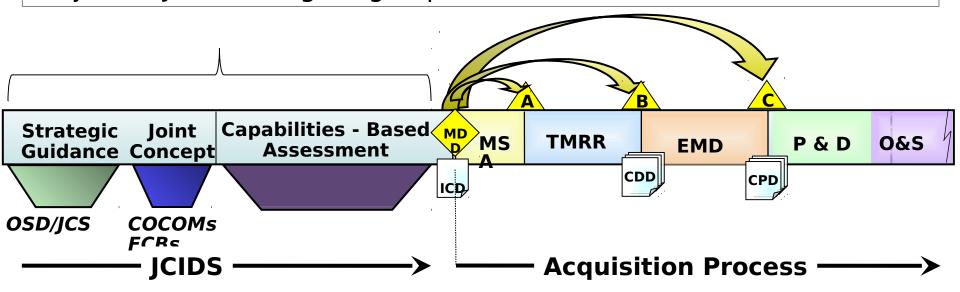


Intended to expedite urgent needs by tailoring the documentation and reviews normally required as part of the deliberate acquisition process

# **Getting to a Materiel Development**

User Needs: JCIDS Capabilities Based Assessment (CBA) leading to an Initial Capabilities Document (ICD)

**Technology Opportunities:** All sources foreign & domestic - SBIR Programs - S&T Activities - ATDs, JCTDs - Qualified Prototype Projects - Joint Warfighting Experiments.



"Following the Materiel Development Decision (MDD), the MDA may authorize entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements."

Version 4.0 1-23-15

DoD DSS, chart

# Materiel Development Decision (MDD)

- A new product is needed and analyzing alternative will Approval to Enterthe Acquisition Process

#### • MDA:

- -Determines acquisition phase of entry
- -Identifies initial review milestone
- -Designates Lead DoD Component
- —Issues Acquisition Decision Memorandum (ADM)

# Information Requirements:

- -Initial Capabilities Document (ICD)
- -Evidence of strong technical foundation
- -AoA Study Guidance and AoA Study Plan

# **Materiel Solution Analysis Phase**

**Purpose:** Assess potential materiel

solutions

**Guided by:** Validated ICD, AoA Study

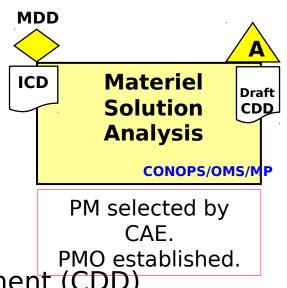
Plan

#### **Major Activities:**

- –Conduct AoA
- Develop Acquisition Strategy (AS)
- Draft Capabilities Development Document (CDD)
- Translate capability gaps into system specific requirements

Minimum funding: For all Phase activities and to support MS A decision

Phase is Complete When: MDA approves materiel solution NOTE: Concept Operations/Operational Mode Summary/Mission Profile (CONOPS/OMS/MP): A Component approved acquisition document that is derived from and consistent with the validated/approved capability requirements document. The CONOPS/OMS/MP describes the operational tasks, events, durations, frequency and environment in which the materiel solution is expected to perform each mission and each phase of the mission. The CONOPS/OMS/MP will be provided to the MDA at the specified decision events and normally provided to industry as part of the RFP.



## Milestone A

#### **PM** presents

- Acquisition Strategy
  - Must be approved by MDA prior to RFP release for TMRR activities
- Business approach
- Framing assumptions
- Risk assessment (and mitigation activities) and
- Appropriate "should cost" targets

# Materiel Development Decision (MDD) ICD Materiel Solution Analysis

#### **Component**

- Presents affordability analysis and affordability goals (Included in ADM)
- Submits their cost estimate for the preferred solution
- Demonstrates that the program will be fully funded in the FYDP

#### **MDA**

 Makes a determination on the materiel solution, release of TMRR REP, and exit criteria for the TMRR Phase

**NOTE:** The Component, <u>not the acquisition community</u>, conducts affordability

analysis (30-40 year period nominally - See Enclosure 8)

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# Program Certification for MS A (Per 10 U.S.C. MDA certifies that: 2366a)

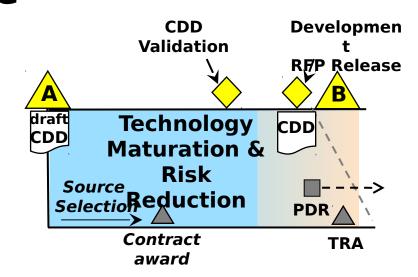
- the program fulfills an approved ICD;
- the program is being executed by an entity with a relevant core competency as identified by the Secretary of Defense;
- if the system duplicates a capability already provided by an existing system, the duplication provided by this system is necessary & appropriate
- a determination of applicability of core depot-level maintenance and repair capabilities requirements has been made;
- an AoA has been performed consistent with the study guidance developed by the Director of Cost Assessment and Program Evaluation (DCAPE);
- a cost estimate for the program has been submitted, with the concurrence of the DCAPE, and the level of resources required to develop and procure the program is consistent with the priority<sub>49</sub>

verside ve bassigned by the JROC;

# **Technology Maturation and Guided by: ICD, AS, Risk Reduction Phase**Draft CDD and SEP

#### Purpose:

- Reduce Technology, Engineering, Integration, and Life Cycle Cost Risks,
- Demonstrate Critical Technologies on Prototypes
- Complete Preliminary Design



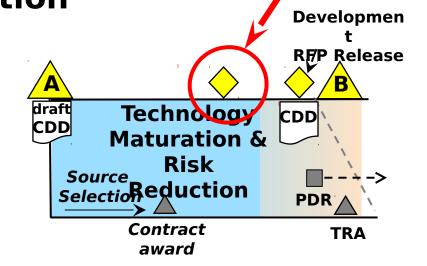
- Basis for Entry: MDA approved materiel solution and AS
- Major Activities: Competitive prototyping; Preliminary Design Review (PDR); CDD Validation; Plan for sustainment; Dev RFP Release; Technology Readiness Assessment (TRA)
- Phase is Complete When: Affordable increment of military-useful capability identified; technology demonstrated in relevant environment; manufacturing risks identified; PDR conducted prior to MS B (unless waived by the MDA)
  - \*Competitive prototyping of the system, or critical sub-systems is a statutory requirement for MDAPs and a regulatory requirement for all other programs

TMRR - Capability Development Document (CDD)

Validation

 The requirements validation authority validates the CDD

- Major cost-performance trades complete.
- Risk reduction sufficient to support preliminary design activities

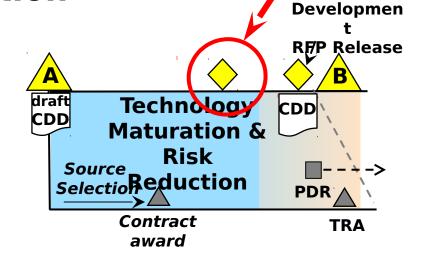


- MDA and/or CAE and the requirements leadership ensure that:
  - o The validated <u>requirements continue to address the</u> <u>priorities of the users in a cost effective & affordable way.</u>
  - Requirements are achievable, affordable, and testable
  - Requirements trades are fully informed by the systems engineering trade-off analyses completed by the PM or the DoD Component.

TMRR - Capability Development Document (CDD)

Validation

 KPPs and KSAs in the CDD guide efforts leading to PDR and inform the RFP Release Decision Point



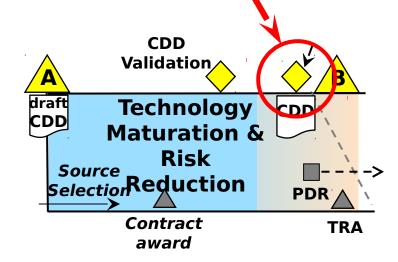
- Configuration Steering Board (CSB)
  - Formed and <u>Chaired by the</u>
     <u>CAE</u> after CDD validation for
  - o MeatslaanAndhogoaresiew potential requirement changes and to propose to the validation authority those changes that may be necessary to achieve affordability constraints on production & sustainment costs, or that will result in a more effective product
  - Changes that increase cost will not be approved unless funds are identified and schedule impacts are addressed

# **Development (RFP) Release Decision**

"The critical decision point in an acquisition program"

Authorizes release of the RFP(s) for EMD (and often for LRIP or limited deployment options)

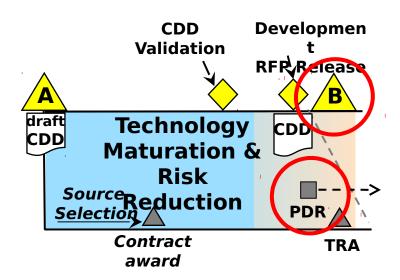
Purpose: Ensure that "an executable and affordable program has been planned" and "to avoid any major program delays at Milestone B, when source selection is already complete and award is imminent"



The program will either succeed or fail, based on the:

- Soundness of the capability requirements,
- Affordability of the program, and the
- Executability of the acquisition strategy.
- MDA determines preliminary LRIP quantities
  The last point at which significant changes can be made without
  a major disruption.

#### TMRR - PDR and MS B



#### **PDR**

- Prior to MS B and before contract award for EMD, unless waived by the MDA
- Results assessed by the MDA prior to required 10 U.S.C.
   2366b Certification

#### <u>MS B</u>

- Authorizes entry into and contract award for EMD
- Formal initiation of the program
- Requires:
  - Demonstration that <u>all sources of</u> <u>risk have been adequately</u> <u>mitigated</u>
  - Full funding in the FYDP
  - Compliance with Affordability goals
  - Framing assumptions
- MDA approves APB as the agreement between the MDA, PM, and Component chain of command
  - Affordability caps set in 5/4
     APB as equivalent to KPPs

# Program Certification for MS B (Per 10 U.S.C. MDA certifies that: 2366b)

- The program is affordable and that appropriate cost, schedule, and performance trade-offs have been made
- Reasonable cost and schedule estimates have been developed
- Funding is available to execute the development and production plan
- PDR and formal Post-PDR assessment complete
- the program demonstrates a high likelihood of accomplishing its
- Anteroprojateissianket research has been conducted
- DoD has completed an AoA
- JROC has accomplished its duties IAW 10 U.S.C. 181(b)
- Program technology has been demonstrated in a relevant environment,
- Life-cycle sustainment planning, including CPC and mitigation planning, has identified and evaluated relevant sustainment costs, and that such costs are reasonable and have been accurately estimated;
- Core depot-level maintenance and repair capabilities requirements have been estimated
- the program <u>complies with all relevant policies</u>, <u>regulations</u>, <u>and directives</u> of the Department of Defense.

# ngineering & Manufacturing Development Guided by: AS, CDD, TEMP

#### **Purpose:**

Develop, build, and test a product to verify that all operational and derived requirements have been met and to support production or deployment decisions

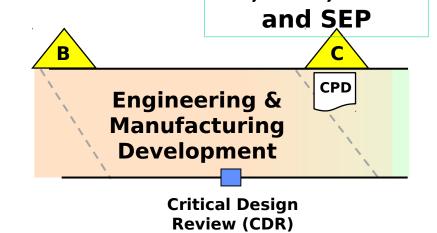
#### **Activities:**

- Complete HW and SW design
- Systematically retire any open risks

- Prepare for production and deployment
- Establish initial product
- Build/test prototypes or first articlesseline to verify compliance with requirements

If a PDR prior to MS B was waived, the PM will plan for / conduct a PDR as soon as feasible after program initiation

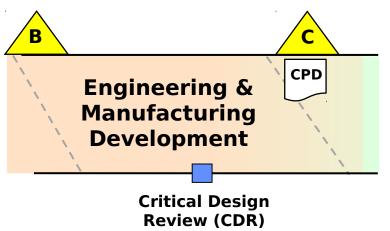
For ACAT ID and IAM programs, the DASD(SE) will participate in the Program's PDR and CDR and conduct the CDR Assessment



# **Engineering & Manufacturing Development**

#### **Activities (Continued):**

- Complete TEMP DT&E activities
- Evaluate achievement of KPPs/KSAs
- Ensure that production, deployment, and OT&E can be supported



- Operational Assessments (OAs) conducted by OTA
- Preparation for Production, Deployment, and Sustainment
- Ensure system design and product support package meet sustainment requirements within affordability caps

**NOTE**: DT and OT activities should, to the extent possible, be planned in conjunction with one another to provide as efficient an overall test process as possible

# **Engineering & Manufacturing Development**

#### **Phase Completion:**

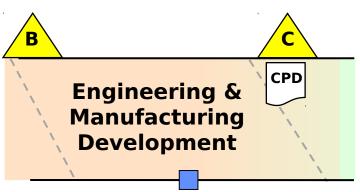
The EMD Phase ends when:

- The design is stable
- Systems meets requirements

  (demonstrated through DT and early OT)

  Critical Design
- Manufacturing processes demonstrated and under control
- SW sustainment processes are in place and functioning
- Industrial production capabilities are reasonably available
- System meets or exceeds all EMD Phase exit criteria and

**NOTE**: EMD will <u>often</u> continue past the initial production or fielding decision until all EMD activities have been completed and all requirements tested and verified



# **Engineering & Manufacturing Development**

# <u>Inherently Government Functions</u> and

#### **Lead System Integrators (LSI):**

 PMs will ensure that the government is singularly responsible for the performance of inherently



**Engineering &** 

**Manufacturing** 

**Development** 

**CPD** 

- John Majeri Mystem calls for the use of a LSI, a contract will not be awarded to an offeror that either has or is expected to acquire a direct financial interest in the development or construction of an individual system or an element of a system of systems within the major system under the LSI.
- The MDA may authorize long lead at any point during EMD or at the Development RFP Release Decision or Milestone B, subject to the availability of appropriations.

# Milestone C Authorizes entry into P & D or Limited Deployment

#### **General MS C criteria include:**

- Updated Acquisition Strategy
- Demonstration that design is stable & meets requirements based on performance in DT
- An Operational Assessment (OA)
- Mature SW capability
- No significant manufacturing risks

- Validated CPD
- Demonstrated interoperability
- Demonstrated operational supportability
- Costs within affordability caps
- Full funding in the FYDP
- Properly phased production ramp-up and deployment

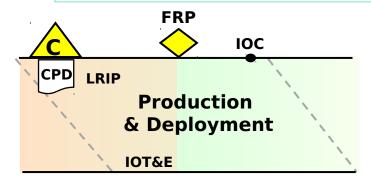
The MDA also considers any new validated threat environments not in the CPD that might affect operation effectiveness and may consult with the requirements validation authority to ensure requirements are current

High-Cost First Article Combined MS B and C Decisions (e.g., Ships & Spacecraft): Prototypes not produced as test articles.  $1^{\rm st}$  articles produced, tested, and fielded as operational assets. Combined MS B and C conducted and development and initial production combined 60

# **Production & Deployment**

**Guided by:** AS, TEMP, CPD, SEP and LCSP

**Purpose:** Produce and deliver requirements compliant products



**Low Rate Initial Production (LRIP)**: Establishes initial production base, provides OT&E test articles and for efficient ramp-up to full-rate production, maintains production continuity pending OT&E completion

**Sustainment and Support Initiated** (If not already started)

**OT&E**: OT in a realistic threat environment to determine operational effectiveness, suitability, and survivability

Full Rate Production (FRP) Decision Review: MDA approval requires control of manufacturing processes, acceptable performance and reliability, and establishment of adequate sustainment and support systems

FRP & Deployment: Production & deployment completion leading to Full Operational Capability (FOC)

Initial Operational Capability (IOC): Operational authority declares IOC when the defined organizations have been equipped and trained and are capable of conducting mission operations

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# **Operations &**

Purpose: Support strategy, satisfy materiel readiness and support performance requirements, and sustain the system over its life cycle (including disposal).



**Begins** after the production and deployment decision and is based on the PM prepared and MDA approved Life-Cycle Support Plan (LCSP). Two <u>Major Efforts</u>

- Sustainment: PM deploys the support package IAW the LSCP. PM assures that resources are programmed and necessary IP deliverable, data, tools, equipment, and facilities are acquired to support each maintenance level. Organic depot capability established IAW the LCSP
- Disposal: At the end of service life. Systems demilitarized and disposed of IAW all legal and regulatory requirements and policies relating to safety, security, and the environment

# **BACKUP SLIDES**

#### **Revised DoDI 5000.02 Structure**

## **Enclosures**

- 1.ACATS & Compliance Requirements 8. Affordability Analysis and
- 2. Program Management
- 3. Systems Engineering
- 4.DT&F
- 5.OT and Live Fire Test and **Evaluation**
- 6.Life-Cycle Sustainment Planning
- 7. Human Systems Integration (HSI)

- **Investment Constraints**
- 9. Analysis of Alternatives
- 10. Cost Estimating and Reporting
  - 11. Requirements Applicable to All Programs Containing IT
- 12. Defense Business Systems (DBS)
- 13. Rapid Fielding of Capabilities

# Enclosure 1: ACATs and Compliance Requirements

- TABLE 1: Definitions and threshold dollars for program designation
- TABLE 2: Statutory and Regulatory Milestone/decision Point Requirements
- TABLE 3: APBs, Breaches and Deviations
- TABLE 4: Statutory Program Breaches and Change Definitions
- TABLE 5: Recurring Program Reports
- TABLE 6: Exceptions, Waivers, and Alternative Reporting Requirements
- TABLE 7: Cost and Software Data Reporting Requirements
- TABLE 8: EVM Requirements
- TABLE 9: Clinger-Cohen Act (CCA) Compliance Management

# Enclosure 1: Notes on Table Changes/Modification

- "When applied to requirements associated with the Development RFP Release Decision Point, the modifier "draft" will mean a Program Manager-, Program Executive Officer- (PEO), and CAE-approved draft subject to change based on results of the source selection process and pre-Milestone B Component and OSD staff coordination"
- APB: STATUTORY for MDAPs at Milestones B and C and the FRP decision; a Regulatory requirement at all other Program Type/Event combinations, including the required draft4 at Development RFP Release. The APB is not approved by the MDA until Milestone B

- Acquisition Strategy: The following STATUTORY requirements will be satisfied in the Acquisition Strategy:
  - <u>BENEFIT ANALYSIS AND DETERMINATION</u>: applies to bundled acquisitions only. Includes MARKET RESEARCH to determine whether consolidation of the requirements is necessary and justified. Required at Milestone C if there was no Milestone B; an update is not required at the FRP/FD decision point.
  - <u>CONSIDERATION OF TECHNOLOGY ISSUES</u>: Promotes, monitors, and evaluates programs for the communication and exchange of technological data. Not required below ACAT II nor after the Development RFP Release.
  - <u>CONTRACT-TYPE DETERMINATION</u>: Satisfied when the MDA approves the Acquisition Strategy with specified contract types. Only required for MDAPs at Development RFP Release and Milestones B and C.
  - <u>COOPERATIVE OPPORTUNITIES</u>: Only due at the first program milestone review.

- Acquisition Strategy: The following STATUTORY requirements will be satisfied in the Acquisition Strategy:
  - GENERAL EQUIPMENT VALUATION: a program description that identifies contract-deliverable military equipment, non-military equipment, and other deliverable items; includes plan(s) to ensure that all deliverable equipment requiring capitalization is serially identified and valued. Only required at Milestone C; updated as necessary for the FRP/FD Decision.
  - INDUSTRIAL BASE CAPABILITIES CONSIDERATIONS: for MDAPs; Regulatory for others. Summarizes the results of the industrial base capabilities' analysis.
  - <u>INTELLECTUAL PROPERTY (IP) STRATEGY</u>: for major weapon systems and subsystems; Regulatory for other program types.
  - MARKET RESEARCH: A stand-alone, Regulatory requirement at MDD.
  - <u>SMALL BUSINESS INNOVATION RESEARCH (SBIR)/SMALL BUSINESS</u> TECHNOLOGY TRANSFER (STTR) PROGRAM TECHNOLOGIES:
  - <u>TERMINATION LIABILITY ESTIMATE</u>: Only for MDAPs.

- Clinger-Cohen Act Compliance: The Program Manager will report CCA compliance to the MDA and the Component CIO or designee. For IT programs employing an incremental development model (i.e., Model 3), the Program Manager will report CCA compliance at each Limited Deployment Decision Point.
- CORE LOGISTICS DETERMINATION / CORE LOGISTICS AND SUSTAINING WORKLOADS ESTIMATE (STATUTORY).
   Only the CORE LOGISTICS DETERMINATION is required at Milestone A. Required at Milestone C if there was no Milestone B. Documented in the LCSP. Not required for AIS programs.
- Corrosion Prevention and Control Plan: Deleted as a required document. See Enclosure 3 for CPC guidance

#### Table e (EVM):

- New guidance reads:
  - EVM is required, as outlined in the table, unless the EVM requirement has been waived by the CAE per paragraph 6c in Enclosure 2.
  - If EVM is not required or a deviation is obtained, the IPMR should be used and tailored to obtain cost and/or schedule reporting when desired by the Government. For example, for full rate production contracts where EVM is not applicable, a tailored IPMR including a cost report showing actuals and a top-level schedule providing delivery dates of end products would be sufficient for Government management and oversight.
  - Flow-down of the IPMR DID to the subcontractors is at the discretion of the program office.

# Enclosure 2: Program Management

- Acquisition Chain of Command and PEO and PM Assignments
  - PM Designated prior to MS A
  - PM must be experienced and DAWIA certified
  - PM measure of success should be Phase planning and execution
  - Assigned for 4 years or Phase completion (3 years for ACAT II)
- Program Office Structure and Organizations
  - MDAP and MAIS PMO key leadership positions will be staffed with qualified military and DoD civilians (IAW USD AT&L Policy Memo, "Key Leadership Positions and Qualification Criteria," November 8, 2013
- Acquisition Strategies
  - Business Approach should fairly allocate risk between industry and government
  - Contract and incentive structure should be tailored to promote desired contractor behavior
  - Competition addressed from inception through the entire life-

## Enclosure 2: Program Management

- Acquisition Strategies (Continued)
  - The strategy must reflect the Program Manager's understanding of the business environment; technical alternatives; small business strategy; costs, risks and risk mitigation approach; contract awards; the incentive structure; test activities; production lot or delivery quantities; operational deployment objectives; opportunities in the domestic and international markets; foreign disclosure, exportability, technology transfer, and security requirements; and the plan to support successful delivery of the capability at an affordable life-cycle price, on a realistic schedule.
- Acquisition Strategies are baseline plans for the execution of the program and should be prepared and submitted in time to obtain approval to support more detailed planning and the preparation of Requests for Proposal. The Acquisition Strategy is an approved plan; it is not a contract. Minor changes to the plan reflected in the Acquisition Strategy due to changed circumstances or increased knowledge are to be expected and do not require MDA pre-approval. Major changes, such as contract version 4.0, 1-23-15 or basic program structure, do require MDA approval prior to 7

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## Enclosure 2: Program Management (Continued)

- Program Baseline Development and Management
  - The APB is the fundamental agreement between the MDA/CAE/PEO/PM
- Program Management Tools
- Earned Value Management (EVM)...unless waived by the CAE
- Risk Management: The PM is responsible for implementing effective risk management and tracking to include the identification of all known risks, (deleted "root cause assessments") key assumptions, probability of occurrence, consequences of occurrence (in terms of cost, schedule, and performance) if not mitigated, analysis of mitigation options, decisions about actions to mitigate risk, and execution of those actions. Risk management is proactive and should be focused on the actions that will be taken and resources that will be allocated to reduce both the likelihood and consequences of risks being realized. Effective risk management is not just risk identification and tracking
- Cost Baseline Control and Use of "Should Cost" Management
- PMs will develop a "should cost" estimate as a management tool version 4.0, 1-26 esigned to proactively target cost reduction and drive

#### Enclosure 2: Program Management (Continued)

- International Acquisition and Exportability considerations...
  - Integrated into the Acquisition Strategy at each MS/Decision Point
  - International Cooperative Program Any program/project with the U.S. and one or more foreign nations, through an international agreement, during any phase of the life-cycle
- Industrial Base Analysis and Considerations
  - Analysis is a continuing process of (1) gathering information to help create appropriate program strategies and (2) updating those strategies throughout the life-cycle.
  - Program management is responsible for incorporating industrial base analysis (to include capacity and capability considerations) into program planning and execution.
- Life-cycle Management of Information and Data Protection
  - IAW DODI 5015.02

### **Enclosure 3: System Engineering**

- The PM, with support of the Lead SE will embed SE in program planning and execution to support the entire system life cycle
- DASD(SE) reviews and approves the SEP for all MDAP and MAIS programs
- <u>Development Planning</u>
  - Decisions to enter the acquisition process, mature technologies, and begin system design must be based on early SE analysis and assessments and a strong technical foundation
- Systems Engineering Trade-Off Analyses
  - PMs will conduct SE trade-off analyses throughout the life-cycle to assess affordability and technical feasibility to support requirements, investments, and acquisition decisions.

### Enclosure 3: System Engineering (Continued)

- Manufacturing and Producibility: Risks identified and managed throughout the life-cycle
  - Documented in the SEP during the MSA Phase
  - Assessed and demonstrated in the TMRR Phase
  - Critical processes assessed as affordable and executable during the EMD Phase
  - Prior to Production ensure risks are acceptable, supplier qualification is complete, processes under statistical process control (SPC)
- Reliability and Maintainability (R&M): An integral part of the SE process
  - Reliability Growth Curves:
    - o In the SEP at MS A and updated in the TEMP starting at MS B
    - Stated in a series of goals and tracked through T&E until the reliability threshold has been achieved
    - o Growth status at DAES reviews

### Enclosure 3: System Engineering (Continued)

- Open Systems Architectures (OSA)
  - Apply OSA approaches where feasible and cost-effective
  - Leverage guidance and procedures found in the "DoD OSA Contract Guidebook for Program Managers"
- <u>Technical Reviews (Content moved from "Design Reviews")</u>
  - For ACAT ID and IAM programs, DASD(SE) will participate in the PDR as the basis for preparing the post-PDR assessment
  - For ACAT ID and IAM programs, DASD(SE) will conduct the CDR assessment
- Open Systems Architecture: PMs will use OSA design principles. . .

### Enclosure 4: Developmental Test and Evaluation

#### MDAP PMs will:

- Designate a Chief Developmental Tester to coordinate planning, management, and oversight of all DT activities...and to Chair the integrated test planning group.
- Designate a government test agency to serve as the lead DT&E agency
- Take full advantage of Government Test Facilities
- Include Reliability Growth Curve(s) in the MS B TEMP (updated in all future TEMPS)
- Ensure that models, simulations, tools, and synthetic environments used to support acquisition decisions are verified, validated, and accredited (VV&A) by the intended user or appropriate agency/OTA
- Develop a strategy and budget for cybersecurity testing
- For accelerated acquisition and urgent programs, levels of developmental testing required will be highly tailored to emphasize schedule over other considerations
- PMs for programs on DASD(DT&E) oversight will designate a T&E
   Working-level Integrated Product Team (WIPT) (also known as an
   Integrated Test Team), as soon as practicable after the Materiel
   Development Decision. The T&E WIPT develops and tracks the T&E
   program in all phases. The T&E WIPT will include empowered

   Version feorestentatives of test data stakeholders such as Systems

- New section on SW testing requires plans for test automation starting at MS-A and a plan for use of software logs starting at MS-B
  - Demonstration of regression testing and SW maintenance at or before IOT&E
- PMs for programs on the DOT&E Oversight list will designate a T&E WIPT (a.k.a. Integrated Test Team) as soon as practicable after the MDD
- The TEMP is a signed contract among DT&E, the MDA, senior DoD leadership, the lead OTA, and the PM
- The lead Operational Test Agency (OTA) will:
  - Prepare and report the results of at least one Early Operational Assessment (EOA) or Operational Assessment (OA) in support of one or more of the design phase life-cycle events (CDD Validation, Development RFP Release, or MS B)
    - **EOA**: An analysis of the program's progress in identifying design constraints, developing capabilities, and mitigation program risks
    - **OA**: A test event conducted before initial production units are available and which incorporates substantial operational realism

- T&E for Reliability Growth...Beginning at MS B...
  - Include reliability growth and growth curves for the whole system and critical sub-systems/components
  - Growth curves will display planned initial reliability, the allocated requirement, expected reliability test results, and results to date
- IOT&E for all programs will use production or productionrepresentative test articles
  - DOT&E will evaluate whether proposed articles are productionrepresentative
  - DOT&E submits a report to the SECDEF and Congress before programs under DOT&E oversight can proceed beyond LRIP
- PMs for all programs may, with lead OTA coordination, elect to perform testing in conjunction with training or joint and operational exercises

- The TEMP is a signed contract among DOT&E, the Deputy Assistant Secretary of Defense (Developmental Test and Evaluation), senior DoD Component leadership, the lead OTA, and the Program Manager.
- The lead OTA for the program and the PM will initiate coordinated planning for IOT&E as early as possible so that developing activities will be aware of expectations at IOT&E:
- Beginning at MS A, the lead OTA will provide a working link in the TEMP to a living document in which the DoD Component's operational rationale for the requirements in the draft Capability Development Document (CDD) or equivalent requirements document will be tracked.
- Scientific test and analysis techniques (also referred to as Design of Experiments methodologies) should be employed to design an effective and efficient T&E program. The TEMP should document the test program that will produce the required data to characterize combat mission capability across an appropriately selected set of factors and conditions.

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- For an acquisition program employing the Incrementally Deployed Software Intensive Program model, a risk-appropriate OA is usually required in support of every limited deployment (see Model 3 at paragraph 5c(3)(d) in this instruction).
- Use of Modeling and Simulation. Models or simulations that utilize or portray threat characteristics or parameters must have that portrayal accredited by the Defense Intelligence Agency. Every distinct use of a model or simulation in support of an operational evaluation will be accredited by an OTA, and, for programs under DOT&E Oversight, its use for the operational evaluation will be approved by DOT&E.
- OT&E For Software See extensive additions to paragraph 7 "OT&E FOR SOFTWARE"
- <u>Cybersecurity</u> The Program Manager and OTA will conduct periodic cybersecurity risk assessments to determine the appropriate Blue/Green/Red Team, and operational impact test events in alignment with the overall test strategy for evaluating the program for real world effects. Defense business systems will undergo Theft/Fraud operational impact testing.

- Resources and Schedule:
  - Resource estimates (including but not limited to quantities of test articles, targets, expendables, threat simulations, operational forces, etc.) will be derived from defensible statistical measures of merit (power and confidence) associated with quantification of the differences among the factors affecting operational performance as well as the risk to the government of accepting a poorly performing system or incorrectly rejecting a system with acceptable performance.
  - Test infrastructure, resources (including threat representations), and tools to be used in operational tests must undergo verification by the developer, validation by the DoD Component, and accreditation by the OTA. Test infrastructure, resources, and tools, and their associated verification, validation, and accreditation strategies will be documented in the TEMP.

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- Integrated Testing is:
  - the collaborative planning and collaborative execution of test phases and events to provide shared data in support of independent analysis, evaluation and reporting by all stakeholders particularly the developmental (both contractor and government) and operational test and evaluation communities.
  - It requires the active participation of the lead OTA in planning the integrated tests with the program office so that the operational objectives are understood, the testing is conducted in an operationally realistic manner, and the resultant data is relevant for use in operational evaluations.
  - For integrated test results to count for operational testing, the lead OTA must develop a plan for the integrated test to be approved by DOT&E before the start of testing that, at a minimum, details the required test realism and conditions, operational test objectives, operational test metrics and data collection requirements

### Enclosure 6: Life-Cycle Sustainment

Increased emphasis on sustainment and operation and support

- The PM will with the support of the SPM employ "should-cost" management and analysis implement a performance-based product support strategy that includes:
  - Sustainment metrics
  - A reliability improvement program based on FMECA
  - Competition, or the option to compete
  - Intellectual Property (IP) deliverables
  - How and when SW required to support the system after IOC will be provided
- The PM and SPM will:
  - Ensure identification of obsolete parts
  - Empoly effective PBL
  - Minimize unique automated test equipment
  - Begin de-militarization and disposal planning with sufficient lead time
  - Plan for Corrosion Prevention and Control

#### Encl. 6: Life-Cycle Sustainment Planning (Cont'd)

- Requires a Life-Cycle Sustainment Plan (LCSP) for <u>all</u> programs
  - Approved by AT&L for ACAT ID and IAM programs and by the CAE or designee for all other ACAT programs
  - Updated at each decision point and includes annexes for:
    - Business Case Analysis Assumptions, constraints, and analyses used to develop the support strategy
    - Core Logistics Analysis to determine applicability of core depot-level requirements IAW 10 U.S.C 2366a
    - Preservation and Storage of Unique Tooling Plan For MDAPS IAW
       Public Law 110-417 to support MS C
    - IP Strategy
- Logistics Assessments conducted as a focused part of Program Support Reviews
- Component-conducted Independent Logistics Assessments for ACAT I and II programs prior to MS B and C and FRPDR to assess sustainment strategy
  - Must specifically assess O&S costs to identify and address factors resulting in cost growth - and adapt strategies to reduce such costs

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### Enclosure 7: Human Systems Integrations (HSI)

- Human Systems Integrations (HSI) is a robust process by which to design and develop systems that effectively and affordably integrate human capabilities and limitations. HSI should be included as an integral part of a total system approach to weapon systems development and acquisition.
- The PM will plan for an implement HSI at each milestone in the lifecycle
- HSI planning will address:
  - Human Factors Engineering to ensure effective human-machine interfaces
  - Personnel manage "special" skill requirements
  - Habitability conditions that impact performance, morale, retention
  - Manpower determine the most efficient/cost-effective mix of support manpower
  - Training develop options for individual, collective, and joint training
  - Safety & Occupational Health integrate HIS and environmental, safety, and occupational health efforts
  - Force Protection and Survivability assess and address risks to personnel

# Enclosure 8: Affordability Analysis & Investment Constraints - New Enclosure

- Establishes the fundamental concepts and approaches for developing and applying affordability constraints as part of life-cycle investment analysis, decision making, and management
- <u>Affordability Analysis is a DoD Component responsibility that will</u> address the total life-cycle of the planned program Nominally, this analysis covers <u>30 to 40 years</u> into the future
- Each Component determines the techniques they use for affordability analysis
- MDA certifies affordability within the FYDP (as required by 10 U.S.C. 2366b)
- Affordability Constraints determined by the resources a Component can allocate for a system, given inventory objectives and all other fiscal demands on the Component
- When constraints cannot be met.....technical requirements, schedule, and quantities must be revisited.....if affordability caps cannot be raised or constraints lowered elsewhere....the program will be canceled

  Version 4.0, 1-23-15

# Enclosure 8: Affordability Analysis & Investment Constraints - New Enclosure

- For ACAT I and IA programs; Components directed to issue similar guidance for ACAT II and below programs
- <u>Timing of Affordability Analysis</u>
  - Initial analysis conducted early enough to inform the AoA constraints
  - At MDD: Tentative "goals" and inventory goals to scope the AoA and provide targets around which to consider alternatives
  - At MS A: Affordability "goals" for unit procurement and sustainment costs
  - At Development RFP Release Point & Beyond:
    - Binding Affordability "Caps" captured in ADMs and APB
    - Treated as KPPs
- Lower ACAT Programs: CAEs will develop and issue similar guidance

# Enclosure 9: Analysis of Alternatives (AoA)

- Assesses potential materiel solutions that could satisfy requirements documented in the ICD.
- DCAPE develops and approves study guidance for the AoA for potential ACAT I and IA programs and for joint military and business requirements for which the JROC Chairman or an Investment Review Board (IRB) is the validation authority
- The final AoA will be provided to the DCAPE not later than 60 days prior to the MS A review (or next decision point designated by the MDA)
  - DCAPE evaluates the AoA and provides a memorandum to the MDA and head of the Component assessing the extent to which the AoA:
    - Examines sufficient feasible alternatives
    - Considers cost/schedule/performance trade-offs
    - Uses sound methodology and addresses key assumptions/variable
    - Bases conclusions on results
    - Considers the fully burdened cost of energy (FBCE) where BCFE is a determinator among alternatives

### **Enclosure 10: Cost Estimating**

- DCAPE provides policies and procedures for conducting cost estimates and analysis for DoD programs (per 10 U.S.C 2334)
- DCAPE <u>conducts</u> Independent Cost Estimates (ICEs) and cost analysis for MDAPs and MAIS programs for which AT&L is the MDA and <u>reviews</u> all cost estimates for MDAP and MAIS programs
- Per 10 U.S.C. 2434, MDAs may not approve entering EMD or production & deployment of an MDAP unless and ICE of the full lifecycle cost, prepared and approved by the DCAPE, has been considered
- At Milestones A,B,C, and FRP Decision, the Component must fully fund the program to the Component Cost Position in the current FYDP, and identify specific offsets to address any funding shortfalls
- For joint programs . . . The lead DoD Component or executive agent will prepare the DoD Component Cost Estimate. All DoD Components involved must either jointly sign or individually submit a DoD Component Cost Position and Full Funding Certification Memorandum.

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# Enclosure 11: Requirements Applicable to all Programs Containing IT

- Defines Information Technology (IT, National Security Systems (NSS) and Information Systems
- Addresses CCA compliance requirements
- Post Implementation Reviews (PIR)
  - Functional Sponsor, Component CIO, and PM are responsible for planning and conducting a PIR for fully deployed IT, including NSS.
  - PIRs evaluate systems to ensure positive return on investment and decide whether continuation, modification, or termination of the system is necessary

- DBS An information system (other than a NSS) operated by, for, or on behalf of the DoD. (Includes financial systems and management information systems)
  - The Component CMO makes the determination that a program is a DBS
  - DBS will enter the acquisition process at the Materiel Development Decision (MDD) and follow the procedures described in paragraph 5d of this instruction. By statute, prior to approving Milestone A or initiating development of any increment of a DBS, the Milestone Decision Authority (MDA) must determine that the program will achieve Initial Operational Capability within 5 years (section 811 of P.L. 109-364 (Reference (k))). For a DBS that is a Major Automated Information System (MAIS) program, the requirements in Table 4 will apply.
- DBS Management Committee (DBSMC)
  - Chaired by DEPSECDEF. Recommends policy and procedures to improve acquisition of DBS. Includes the MDA.
  - Approval authority for statutorily required DBS
    - Certification required prior to any obligation of funds for acquisition.
       Programs re-certified annually
- Investment Review Board (IRB)
  - Chaired as directed by the DEPSECDEF
  - Assists the Chair in:
    - Prioritizing requirements

- DBS Management Committee (DBSMC)
  - Chaired by DEPSECDEF. Recommends policy and procedures to improve acquisition of DBS. Includes the MDA.
  - Approval authority for statutorily required DBS
    - Certification required prior to any obligation of funds for acquisition. Programs re-certified annually
- Investment Review Board (IRB)
  - Established and Chaired by the Deputy CMO
  - Assists the Chair in:
    - Prioritizing requirements
    - Reviewing problem statements and investment certification requests
  - The IRB Chair will ensure that the business need and recommended solution are consistent with portfolio priorities and are compliant with the Business Enterprise Architecture.
- When an increment is fully deployed, the Program Manager will schedule a close-out review with the MDA and the IRB to determine whether the investment has achieved the outcomes

  Version 4.0, 1-23 defined in the Problem Statement

- DBS Management
- Investment Review Board (IRB) Continued
  - The Functional Sponsor will review the threshold capability requirements and, if refinement is required, propose changes to the IRB chair for approval prior to the Milestone or Decision Point.
    - Prior to the Development Request for Proposal (RFP) Release Decision Point, the Functional Sponsor will:
      - (a) Define Full Deployment for the increment.
      - (b) Ensure business process re-engineering is successfully completed.

<u>DoD Component Head and Acquisition Executive</u>. The DoD Component head and the Component Acquisition Executive will provide oversight of a DBS program that does not meet the MAIS thresholds in Table 1,

#### **DBS PROBLEM STATEMENT**:

- DBS generally do not employ JCIDS procedures for the development and validation of capability requirements documents.
- Instead functional sponsors will analyze a perceived business problem, capability gap, or opportunity and document the results in a Problem Statement.
- The Problem statement will include measurable business outcomes, a rough order of magnitude cost estimate and projected/anticipated financial return measures such as net present value, payback or return on investment.
  - The Problem Statement must be reviewed by the IRB and approved by the IRB chair.
  - The Problem Statement will be refined over time to inform post-MDD decision making.
  - The final Problem Statement will be reviewed by the IRB and approved by the IRB chair prior to the Development RFP Release Decision Point.
  - Approved Problem Statements will be submitted to the MDA 30 days prior to the MDD

# Enclosure 13: Rapid Fielding of Capabilities

- Provides policy and procedures for acquisition programs that fulfill urgent needs that can be fielded in less than 2 years and which are below ACAT I/IA cost thresholds
- Approval authority delegated to levels that promote rapid acquisition
- Critical warfighter issues identified by the Warfighter Senior Integration Group (SIG)
  - SIG Chairman approves urgent needs and provides instructions to Components on program execution and management
- SECDEF Rapid Acquisition Authority (RAA) Determination Tasks a Component to fulfill the urgent need. Component designates the MDA
  - Generally, funds will have to be reprioritized and/or reprogrammed to meet urgent needs and expedite the acquisition process. SIG Chairman approves urgent needs and provides instructions to Components on program execution and management

### Enclosure 13: Rapid Fielding of Capabilities

- Pre-Development Assess and select a course of action to meet the need. Requires a valid UON statement
  - PM appointed. Courses of Actions (COAs) assessed. COA selected by MDA. Acquisition approach and O&S plans selected.
- Development PM briefs strategy to MDA. MDA determines whether solution:
  - Can be fielded within 2 years, does not require substantial development effort, is based on proven and available technologies, and can be acquired under fixed-price contracts
- Production & Deployment PM summarizes development activities and plans for delivery and sustainment, post-fielding assessments, and training of operator and maintenance personnel. Requires MDA approval.
- Operations and Support IAW plan approved by MDA. Disposition Analysis done NLT 1-year after fielding. Disposition official recommends either:
- Termination (Demilitarization or Disposal), Sustainment for a Version 4.0, 1包括 Contingency, or Transition to a Program of Record

# Enclosure 13: Rapid Fielding of Capabilities Jan 2015 Additions

- For JUONs and JEONs, the validation approval will be by the Joint Staff in accordance with the Joint Capability Integration Development System (JCIDS) detailed in the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01H
- A Warfighter Senior Integration Group (SIG)-Identified Urgent Issue.
  This is a critical warfighter issue, e.g. materiel support to a coalition
  partner, identified by the Co-Chairs of the Warfighter SIG in
  accordance with DoD Directive 5000.71. The Co-Chairs of the
  Warfighter SIG will approve a critical warfighter issue statement and
  provide instructions to DoD Component(s) on program execution and
  management.
- Pre-Development begins upon receipt of either a validated UON, approval of a critical warfighter issue statement by the co-chairs of the Warfighter SIG per DoD Directive 5000.71, or a Secretary of Defense RAA determination document

# Enclosure 13: Rapid Fielding of Capabilities Jan 2015 Additions

- Upon Pre-Development initiation, the designated Component Acquisition Executive (CAE) will immediately appoint a Program Manager and an MDA
- For each approved course of action, the Program Manager will develop a draft Acquisition Strategy and an abbreviated program baseline based on readily available information.
- The Acquisition Strategy will comply with the requirements in Table 10 of this enclosure and the items in Table 2 of Enclosure 1 that are required for ACAT II and III programs
- The MDA will . . . Approve the planned testing approach. A normal Test and Evaluation Master Plan (TEMP) is generally not necessary. . . . An Operational Test Plan for the required pre-deployment performance assessment is generally adequate . . . the Program Manager should prepare a combined operational and live fire test plan for DOT&E approval.

# Enclosure 13: Rapid Fielding of Capabilities Jan 2015 Additions

- P&D Milestone.... The MDA, in consultation with the supporting operational test organization, and with the concurrence of DOT&E for programs on DOT&E oversight, will determine:
  - Whether the capability has been adequately reviewed, performs satisfactorily, is supportable, and is ready for production and deployment.
  - When assessments of fielded capabilities are required.
- the DoD Component head and the CAE will prepare a determination document for disposition of the system
- The disposition recommendation will be made to the DoD Component head for UONs, critical warfighter issues identified by the Warfighter SIG, or Secretary of Defense RAA determinations.

# Summary: DoD Decision Support Systems

	<u>System</u>	<u>Focal Point</u>	<u>Driver</u> <u>C</u>	<u>utput</u>
-	DAMS	MDA	Events/Phases/MS	Proceed
	PPBE	DEPSECDEF	Calendar	Funding
	JCIDS Requireme	VCJCS nts	Capability Ne	eds